Complications From International Surgery Tourism

Mark M. Melendez, MD, MBA; and Kaveh Alizadeh, MD, MSc, FACS

Abstract
Medical tourism is an increasing trend, particularly in cosmetic surgery. Complications resulting from these procedures can be quite disruptive to the healthcare industry in the United States since patients often seek treatment and have no compensation recourse from insurance. Despite the increasing number of plastic surgery patients seeking procedures abroad, there have been little reported data concerning outcomes, follow-up, or complication rates. Through a survey of American Society of Plastic Surgeons (ASPS) members, the authors provide data on trends to help define the scope of the problem.

Keywords
tourism, complications, international cosmetic surgery

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An increasing number of Americans have begun traveling outside the country for medical treatment, a phenomenon commonly referred to as “medical tourism.” In 2008, it was estimated that approximately 1.3 million Americans sought healthcare procedures abroad, and that number is expected to double by 2011.1 A report by the Deloitte Center for Health Solutions estimated that by 2017, about 15.8 million US patients will receive care outside of the country, resulting in a potential “opportunity cost” to US clinicians of about $373 billion.2 Many international plastic surgeons offer large procedural discounts to patients, making this medical tourism trend of particular concern to plastic surgeons in the United States. Although the medical tourism movement is not directly tied to the state of our economy, there is some economic motivation for patients whose procedures are not covered by insurance (or who do not have insurance), and some clinics are compromising the quality of care to offer discounts. American marketing companies are luring patients by combining their desire for cosmetic enhancement with the allure of a “vacation.” In these ways, cosmetic surgery tourism is certainly a price-driven phenomenon.3 In some cases, access to a new technology or procedure not yet approved in the United States is also attracting patients to international countries.4,5

Despite the increasing number of plastic surgery patients seeking procedures abroad, there is a paucity of data concerning outcomes, follow-up, and complication rates. We report the results of a survey of American Society of Plastic Surgeons (ASPS) members concerning their experience treating medical tourism patients with complications who returned to the United States for resolution of their issues.

METHODS
We distributed a 15-question survey by e-mail to 2000 active ASPS members. Recipients were questioned about their overall experience with patients who traveled abroad, the types of complications they had seen, treatments

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rendered, compensation received, and their own demographic data (such as type and location of practice). The responses were recorded and tabulated for descriptive analysis.

RESULTS

A total of 368 responses (18.4%) were received. The majority of respondents were private practitioners in a solo practice (61.1%; Table 1), mainly from a metropolitan area and treating a mixture of cosmetic and reconstructive patients (Table 2). We found that a vast majority of respondents (80.4%; 296) had experience with patients who had traveled abroad for cosmetic procedures; they mostly reported seeing one to three such patients in the past five years. Many (190; 51.6%) reported noticing an increasing trend in the number of patients presenting with complications from surgical tourism (Table 3). The majority of the patients who were self-referred via the emergency room underwent either breast augmentation or body contouring procedures. More than half of the patients required multiple operations, and at least one patient required over a month of hospitalization in a surgical intensive care unit. The largest percentage of reported complications (31%) was a result of infection, followed by dehiscence, contour abnormality, and hematoma (Figure 1). Compensation for complication treatment was highly variable, as not all patients/procedures were covered by insurance. The numbers of complications from plastic surgery procedures were as high in frequency (30%) for non-plastic surgeons as other American Board of Medical Specialties certified physicians. The majority of respondents (83.9%) also reported treating patients with complications who had undergone cosmetic procedures by noncore practitioners (ie, non–plastic surgeons; Figure 2).

Table 1. Trends Observed in Patients Presenting With Cosmetic Tourism Complications

<table>
<thead>
<tr>
<th>Type of Practice</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo practice</td>
<td>53.2</td>
</tr>
<tr>
<td>Solo practice–shared facility</td>
<td>7.9</td>
</tr>
<tr>
<td>Small plastic surgery group practice (2-5 plastic surgeons)</td>
<td>20.2</td>
</tr>
<tr>
<td>Large plastic surgery group practice (6 or more plastic surgeons)</td>
<td>2.0</td>
</tr>
<tr>
<td>Medium multispecialty group practice (8-20 physicians)</td>
<td>0.4</td>
</tr>
<tr>
<td>Large multispecialty group practice (more than 20 physicians)</td>
<td>4.8</td>
</tr>
<tr>
<td>Academic practice</td>
<td>10.7</td>
</tr>
<tr>
<td>Military</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Table 2. Respondent Practice Types

<table>
<thead>
<tr>
<th>Practice Makeup</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% reconstructive</td>
<td>7.9</td>
</tr>
<tr>
<td>Approximately 25% cosmetic and 75% reconstructive</td>
<td>20.5</td>
</tr>
<tr>
<td>Approximately 50% cosmetic and 50% reconstructive</td>
<td>28.8</td>
</tr>
<tr>
<td>Approximately 75% cosmetic and 25% reconstructive</td>
<td>30.3</td>
</tr>
<tr>
<td>100% cosmetic</td>
<td>14.6</td>
</tr>
</tbody>
</table>

Table 3. Respondent Practice Makeup

<table>
<thead>
<tr>
<th>Trend Observed in Patients Presenting With Cosmetic Tourism Complications</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing over past five years</td>
<td>51.6</td>
</tr>
<tr>
<td>No change seen</td>
<td>47.5</td>
</tr>
<tr>
<td>Decreased over past five years</td>
<td>0.9</td>
</tr>
</tbody>
</table>

DISCUSSION

Even though cosmetic surgery tourism is a rapidly expanding global phenomenon, few studies have been published about the delivery of care and the incidence of complications.6,7 In this study, we sought to examine the potential complications resulting from patients who seek procedures abroad by surveying members of a national plastic surgery organization (ASPS). We hypothesized that the magnitude of the complications resulting from cosmetic surgery overseas is significant and growing, and the reports from survey respondents reinforced this theory since the majority have seen an increasing trend in patients presenting with complications from surgical tourism over the past five years.

Evans et al8 published an article in 2010 revealing that more than 50% of the attendees of the Transatlantic Innovations Meeting in Paris, France, believed that medical tourism was an international issue and did have an effect on their practice. In addition, more than 75% of participants also believed that complications related to medical tourism should not be covered by national healthcare. Our survey demonstrated that the level of compensation for treating patients with complications varied, but the majority of respondents were not compensated at all. This places a burden on the treating physician, who provides care to patients who may be uninsured.

In recent years, other surveys have reported similar results in terms of trends toward an increase in the number of patients being treated. The International Society of Aesthetic Plastic Surgery (ISAPS) News Survey asked how readers interpreted the growth of medical tourism and found that 56% considered it a modern reality; however, 25.4% considered medical tourism a dangerous trend. Fewer than 16% saw medical tourism as a good opportunity to grow their
practice; 3% thought it unethical. The British Association of Aesthetic Plastic Surgeons (BAAPS) survey reported that more than 80% of respondents had seen complications with patients returning from “holiday surgery.” Some other concerns reported by BAAPS respondents included language barriers and lower standards of quality in some countries. The British Association of Plastic, Reconstructive, and Aesthetic Surgeons (BAPRAS) surveyed 208 members to inquire whether they had treated patients with problems following cosmetic procedures performed outside the United Kingdom. Approximately 40% reported having seen an increasing number of patients with complications, mainly from breast augmentation and abdominoplasty. Patients were predominately referred by a general practitioner, and 74% required treatment.

The American Society for Aesthetic Plastic Surgery (ASAPS), ISAPS, and ASPS have all provided guidelines, along with a patient safety checklist, to aid consumers who are seriously considering cosmetic surgery abroad. Both ASAPS and ASPS enable users to search the member directory to locate international members on their Web sites, and both organizations make strong statements urging patients to consider the potential complications, unsatisfactory results, and risks to their general health that may occur when seeking cosmetic surgery procedures abroad.

Birch et al distributed an 11-question survey to 65 National Health Service (NHS) consultants in the 11 NHS plastic surgical units of the Pan Thames region in the United Kingdom. The study concluded that complications of cosmetic tourism do occur and have an impact on NHS resources once the patients have returned home. In 2008, the Journal of Plastic, Reconstructive, and Aesthetic Surgery published an editorial on cosmetic tourism and the burden on the NHS. It highlighted the impact cosmetic tourism has had on UK plastic surgeons, addressing the funding necessary to treat complications and the need for national guidelines on their management. Nassab et al conducted an opinion poll of the general public in the United Kingdom to further investigate patients’ information-seeking patterns on the Internet prior to traveling for cosmetic surgery. The study found that the great majority of respondents would consider having surgery abroad, mainly due to lower costs; there was a significant lack of information on potential complications and follow-up found on the Web sites examined in the study. Interestingly, the majority of those interviewed about complications said that they would seek intervention from their local health service rather than the primary surgeon in case of a complication. These findings were all consistent with our study, where the majority of the complications were not treated by the primary plastic surgeon.

The American College of Surgeons’ consensus statement and the American Medical Association’s guidelines both provide an important set of principles for consideration by patients, employers, insurers, and other third-party groups responsible for coordinating such travel outside of the country. However, these considerations may not be initially important to the consumer, who is traditionally driven by price rather than quality. Furthermore, it is very difficult to regulate specific standards once abroad, whether in regard to the surgeon, the medical facility or surgical center, or the technique/procedure. Patients are therefore strongly encouraged to seek care at institutions that have met accreditation standards established by organizations such as the International Joint Commission for Certification. Physicians are also strongly encouraged to open a dialogue with international colleagues, societies, and governing bodies. Some countries, such as France, do have national guidelines for the practice of aesthetic surgery; more of these established regulations could drastically minimize risks in cosmetic surgery. Consensus guidelines from ASPS and ASPS providing protocols for the surgeon treating medical tourism complications would be helpful, as would implementing a system that allows accurate reporting of these concerns (such as the Tracking Operations and Outcomes for Plastic Surgeons program, TOPS).

One limitation of our study was the low response rate, which was due to the single method of survey distribution. Sending the survey by mail and/or calling the nonrespondents directly may have increased our response rate. Furthermore, the descriptive format of the survey limited our statistical analysis to frequency ranges only. Different types of questions will be considered for our follow-up study, to allow for a more in-depth statistical analysis.
**CONCLUSIONS**

Medical tourism is a price-driven phenomenon that often appeals to a subset of patients who may not be educated about the importance of outcomes and complication rates. Therefore, plastic surgeons must engage more heavily in conversations with international governing bodies that allow for the gathering and reporting of data on an annual basis, which will provide a platform from which to educate patients and physicians about potential pitfalls and complications. The preliminary data from this survey establish a foundation for future outcomes analysis of international surgery patients and convey a clear message that there is a need for improved public awareness and education regarding medical tourism.

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**REFERENCES**